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OIPE

RAW SEQUENCE LISTING

DATE: 07/30/2001

PATENT APPLICATION: US/09/810,186

TIME: 10:58:40

Input Set : A:\204934US0.txt

Output Set: N:\CRF3\07302001\I810186.raw

3 <110> APPLICANT: OHSUMI, CHIEKO

4 TAJI, TERUAKI

5 SHINOZAKI, KAZUO

7 <120> TITLE OF INVENTION: A METHOD FOR PROVIDING A PROPERTY OF STRESS-RESISTANCE

9 <130> FILE REFERENCE: 204934US0

L {c--> 11 <140> CURRENT APPLICATION NUMBER: 09/810,186

12 <141> CURRENT FILING DATE: 2001-07-23

14 <150> PRIOR APPLICATION NUMBER: JP 72668/2001

15 <151> PRIOR FILING DATE: 2001-03-14

17 <160> NUMBER OF SEQ ID NOS: 4

19 <170> SOFTWARE: PatentIn version 3.1

21 <210> SEQ ID NO: 1

22 <211> LENGTH: 750

23 <212> TYPE: PRT

24 <213> ORGANISM: Glycine max

26 <400> SEQUENCE: 1

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29 1 5 10 15

32 His Gly Lys Thr Ile Leu Thr Gly Val Pro Asp Asn Val Val Leu Thr

33 20 25 30

36 Pro Gly Ser Gly Arg Gly Leu Val Thr Gly Ala Phe Val Gly Ala Thr

37 35 40 45

40 Ala Ser His Ser Lys Ser Leu His Val Phe Pro Met Gly Val Leu Glu

41 50 55 60

44 Gly Leu Arg Phe Met Cys Cys Phe Arg Phe Lys Leu Trp Trp Met Thr

45 65 70 75 80

48 Gln Arg Met Gly Thr Cys Gly Arg Asp Val Pro Leu Glu Thr Gln Phe

49 85 90 95

52 Met Leu Ile Glu Ser Lys Glu Ser Glu Thr Asp Gly Glu Asn Ser Pro

53 100 105 110

56 Ile Ile Tyr Thr Val Leu Leu Pro Leu Leu Glu Gly Gln Phe Arg Ala

57 115 120 125

60 Val Leu Gln Gly Asn Asp Lys Asn Glu Ile Glu Ile Cys Leu Glu Ser

61 130 135 140

64 Gly Asp Asn Ala Val Glu Thr Asp Gln Gly Leu His Met Val Tyr Met

65 145 150 155 160

68 His Ala Gly Thr Asn Pro Phe Glu Val Ile Asn Gln Ala Val Lys Ala

69 165 170 175

72 Val Glu Lys His Met Gln Thr Phe Leu His Arg Glu Lys Lys Arg Leu

73 180 185 190

76 Pro Ser Cys Leu Asp Trp Phe Gly Trp Cys Thr Trp Asp Ala Phe Tyr

77 195 200 205

80 Thr Asp Val Thr Ala Glu Gly Val Glu Glu Gly Leu Lys Ser Leu Ser

81 210 215 220

84 Gln Gly Gly Thr Pro Pro Arg Phe Leu Ile Ile Asp Asp Gly Trp Gln

85 225 230 235 240

88 Gln Ile Glu Asn Lys Ala Lys Asp Ala Thr Glu Cys Leu Val Gln Glu

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92 Gly Ala Gln Phe Ala Thr Arg Leu Thr Gly Ile Lys Glu Asn Thr Lys
93          260          265          270
96 Phe Gln Lys Lys Leu Gln Asn Asn Glu Gln Met Ser Gly Leu Lys His
97          275          280          285
100 Leu Val His Gly Ala Lys Gln His His Asn Val Lys Asn Val Tyr Val
101          290          295          300
104 Trp His Ala Leu Ala Gly Tyr Trp Gly Gly Val Lys Pro Ala Ala Thr
105 305          310          315          320
108 Gly Met Glu His Tyr Asp Thr Ala Leu Ala Tyr Pro Val Gln Ser Pro
109          325          330          335
112 Gly Val Leu Gly Asn Gln Pro Asp Ile Val Met Asp Ser Leu Ala Val
113          340          345          350
116 His Gly Leu Gly Leu Val His Pro Lys Lys Val Phe Asn Phe Tyr Asn
117          355          360          365
120 Glu Leu His Ala Tyr Leu Ala Ser Cys Gly Val Asp Gly Val Lys Val
121          370          375          380
124 Asp Val Gln Asn Ile Ile Glu Thr Leu Gly Ala Gly His Gly Gly Arg
125 385          390          395          400
128 Val Ser Leu Thr Arg Ser Tyr His His Ala Leu Glu Ala Ser Ile Ala
129          405          410          415
132 Ser Asn Phe Thr Asp Asn Gly Cys Ile Ala Cys Met Cys His Asn Thr
133          420          425          430
136 Asp Gly Leu Tyr Ser Ala Lys Gln Thr Ala Ile Val Arg Ala Ser Asp
137          435          440          445
140 Asp Phe Tyr Pro Arg Asp Pro Ala Ser His Thr Ile His Ile Ser Ser
141          450          455          460
144 Val Ala Tyr Asn Ser Leu Phe Leu Gly Glu Phe Met Gln Pro Asp Trp
145 465          470          475          480
148 Asp Met Phe His Ser Leu His Pro Ala Ala Asp Tyr His Ala Ala Ala
149          485          490          495
152 Arg Ala Ile Gly Gly Cys Pro Ile Tyr Val Ser Asp Lys Pro Gly Asn
153          500          505          510
156 His Asn Phe Asp Leu Leu Lys Lys Leu Val Leu Pro Asp Gly Ser Val
157          515          520          525
160 Leu Arg Ala Gln Leu Pro Gly Arg Pro Thr Arg Asp Ser Leu Phe Val
161          530          535          540
164 Asp Pro Ala Arg Asp Arg Thr Ser Leu Leu Lys Ile Trp Asn Leu Asn
165 545          550          555          560
168 Lys Cys Ser Gly Val Val Gly Val Phe Asn Cys Gln Gly Ala Gly Trp
169          565          570          575
172 Cys Lys Ile Glu Lys Lys Thr Arg Ile His Asp Thr Ser Pro Gly Thr
173          580          585          590
176 Leu Thr Ala Ser Val Cys Ala Ser Asp Val Asp Leu Ile Thr Gln Val
177          595          600          605
180 Ala Gly Ala Glu Trp Leu Gly Asp Thr Ile Val Tyr Ala Tyr Arg Ser
181          610          615          620
184 Gly Glu Val Ile Arg Leu Pro Lys Gly Val Ser Ile Pro Val Thr Leu
185 625          630          635          640

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188 Lys Val Leu Glu Phe Glu Leu Phe His Phe Cys Pro Ile Gln Glu Ile
189           645           650           655
192 Ala Pro Ser Ile Ser Phe Ala Ala Ile Gly Leu Leu Asp Met Phe Asn
193           660           665           670
196 Thr Gly Gly Ala Val Glu Gln Val Glu Ile His Asn Arg Ala Ala Thr
197           675           680           685
200 Lys Thr Ile Ala Leu Ser Val Arg Gly Arg Gly Arg Phe Gly Val Tyr
201           690           695           700
204 Ser Ser Gln Arg Pro Leu Lys Cys Val Val Gly Gly Ala Glu Thr Asp
205 705           710           715           720
208 Phe Asn Tyr Asp Ser Glu Thr Gly Leu Thr Thr Phe Ser Ile Pro Val
209           725           730           735
212 Ser Pro Glu Glu Met Tyr Arg Trp Ser Ile Glu Ile Gln Val
213           740           745           750
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217 <211> LENGTH: 2780
218 <212> TYPE: DNA
219 <213> ORGANISM: Glycine max
221 <400> SEQUENCE: 2
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224 acttctctaa gttgctaagt taattgctcc ttcatttttt cactcttcgt tctcgcgtac 120
226 ccgtgtcacg gtaactcgtg gtgaagtgtt cgaaaatgac tgtcacacct aagatctcag 180
228 ttaacgatgg gaaacttggt gtccatggta agaccattct gactggagtg ccagacaacg 240
230 ttgtgctgac tccaggttct ggaaggggtc ttgtgactgg tgcttttggt ggtgccacag 300
232 cttcacacag caaaagtctc catgtgtttc caatgggtgt tttagagggg ctccggttca 360
234 tgtgttggtt cgggttcaag ttatggtgga tgactcagag aatgggaact tgtgggaggg 420
236 atgttcctct ggagactcaa ttcatgctta ttgagagcaa agagagtga actgatgggg 480
238 agaattctcc aatcatctac actgtcttgc ttctctctct cgaaggtcaa ttccgagctg 540
240 ttcttcaagg caatgacaag aacgagatag agatttgctt cgagagtggg gataatgcag 600
242 ttgagactga ccaaggcctt cacatggttt acatgcattg tgggaccaat ccctttgaag 660
244 tcatcaatca agctgtcaag gctgtggaaa aacacatgca aacttttctt catcgtgaga 720
246 agaaaagggt gccatcttgt cttgactggg ttggatgggt cacatgggat gctttctata 780
248 ctgatgtcac agctgagggt gttgaggaag gcctgaaaag tctatcacag ggaggtacac 840
250 ctccacgatt cctcatcata gatgatggtt ggcaacagat tgaaaataaa gcaaaggatg 900
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258 ctggttattg ggggtgagtg aagccagcag caaccggcat ggaacattat gacactgcct 1140
260 tggcatatcc agtgcagtca ccaggcgtgc taggaaacca accagacatt gtcattggaca 1200
262 gcttggtgtg acatggcctt ggctagtgc acccaaagaa ggttttcaat ttctacaacg 1260
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270 gtcacaacac tgatggactt tatagtgcta agcagactgc tattgtgaga gcttctgatg 1500
272 atttttaccg tcgtgatcct gcttcccata ccatccatat ttcttctggt gcatacaact 1560
274 cactattcct tggagaattc atgcaacctg actgggacat gtttcatagt ttacaccacg 1620
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278 agccaggcaa tcacaatttt gatcttctta agaagctggt tctcccggat ggttcgggtc 1740
280 tccgtgctca gttacctggc aggccaaact gtgattctct atttgtggat ccagccagag 1800

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282 ataggactag cttgctcaaa atatggaacc tgaacaaatg ctctggagtt gttggtgtat 1860
284 ttaactgcca aggtgctgga tgggtgcaaga tagagaagaa aaccgcgcatc catgatacat 1920
286 ctcttggtac actcaccgcc tctgtctgcg cctctgatgt tgacctcatc acacaagtag 1980
288 caggtgctga atggcttgga gatacaattg tttatgctta cagatcaggt gaggtgattc 2040
290 ggctaccaaa aggggtttca attccagtga cactaaaagt tctggagttt gagcttttcc 2100
292 acttctgtcc aatccaagaa atagctccaa gtatatcatt tgcagcaata gggctactgg 2160
294 atatgttcaa cactggagga gcagtggagc aggttgagat tcataaccga gcagcaacga 2220
296 aaacaatagc tcttagtgta aggggaagag gcagatttgg agtttactcc tcccagagac 2280
298 cactgaagtg tgtggttagt ggcgctgaaa ccgacttcaa ctatgactca gagaccgggt 2340
300 tgacaacctt ctccattcca gtttctccag aggagatgta cagatgggtca atagagatcc 2400
302 aagtttgagt cctttttaag acttgggtgtt tgatgcattg ttgtatcagg agaagggttt 2460
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308 gctagacaag gcatgttgta gtagtcatgg ggtggggaag tccttttggt gtagcatgta 2640
310 atttggttta gacttgtagt atgtcatcaa ttagatggat aaagagagaa tattgttatt 2700
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314 ataataaaaa aaaaaaaaaa 2780
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318 <211> LENGTH: 20
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Synthetic DNA 0.8
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329 <210> SEQ ID NO: 4
330 <211> LENGTH: 20
331 <212> TYPE: DNA
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334 <220> FEATURE:
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337 <400> SEQUENCE: 4
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/810,186

DATE: 07/30/2001

TIME: 10:58:41

Input Set : A:\204934US0.txt

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